STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION

P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

Form C-122
Revised 10-1-78

RECEIVED
SEP 02 '88
O. C. D.
ARTESIA, OFFICE

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test: [X] Initial [ ] Annual [ ] Special			Test Date: 8-2-88	
Company: MARATHON ✓	Connection: AIR			
Pool: Indian Basin Morrow	Formation: MORROW		Unit	
Completion Date: 6-10-88	Total Depth: 9755	Plug Back TD: 9740	Elevation: 3753	Farm or Lease Name: INDIAN BASIN
Csg. Size: 5.5 / Wt.: 17 / d: 4.892 / Set At: 9740		Perforations: From 9623 To 9712		Well No.: 6
Tbg. Size: 2.875 / Wt.: 6.5 / d: 2.441 / Set At:		Perforations: From To		Unit: N / Sec.: 30 / Twp.: 21 / Rge.: 24
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: SINGLE		Packer Set At: 9561		County: EDDY
Producing Thru: TUBING	Reservoir Temp. °F: 194° 9668	Mean Annual Temp. °F: 60°	Baro. Press. – P_a: 13.2	State: NEW MEXICO

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
9668	9668	.613	.66	0.15	0	0	4.026	FLNG

	FLOW DATA				TUBING DATA		CASING DATA		
NO.	Prover Line Size X Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	Duration of Flow
SI					2190				72
1.	4.026X1.250	180	8.5	95	1995	80			1
2.	4.026X1.250	190	13.0	94	1800	76			1
3.	4.026X1.250	210	24.0	90	1660	78			1
4.	4.026X1.250	200	45.0	90	1550	80			1
5.									

RATE OF FLOW CALCULATIONS

NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P_m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1	7.469	40.52	193.2	.9680	1.277	1.014	379
2.	7.469	51.40	203.2	.9688	1.277	1.014	482
3	7.469	73.19	223.2	.9723	1.277	1.014	690
4.	7.469	97.95	213.2	.9723	1.277	1.014	923
5.							

NO.	P_t	Temp. °R	T_r	Z
1	.29	555	1.54	.973
2.	.30	554	1.53	.972
3.	.33	550	1.52	.968
4.	.32	550	1.52	.969
5				

Gas Liquid Hydrocarbon Ratio 0 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 0 Deg.
Specific Gravity Separator Gas .613 XXXXXXXXXX
Specific Gravity Flowing Fluid XXXXX .613
Critical Pressure 674 P.S.I.A. 674 P.S.I.A.
Critical Temperature 361 R 361 R

P_c 2171.9 P_c^2 4717

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		1993	3973	744
2		1803	3251	1466
3		1664	2768	1949
4		1555	2418	2299
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.0515$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.7609$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1625.$

Post ID-2
9-23-88
comp + BK

Absolute Open Flow 1625.0 Mcfd @ 15.025 Angle of Slope θ 51.8 Slope, n .787

Remarks:

Approved By Division	Conducted By:	Calculated By:	Checked By:
	BENNETT & CATHEY	MATT LEE	CARL A. BAGWELL